

In the Claims

Please cancel in this application, without prejudice, claims 18-39 as shown in the attached text of the pending claims.

1. (Original) The method of assembling a loudspeaker, comprising:
 - (a) aligning the frame and the motor structure of the loudspeaker with one another and then connecting them together;
 - (b) forming the moving assembly of the loudspeaker as a unit separate from the frame of the loudspeaker; and
 - (c) connecting the moving assembly to the frame and to the motor structure.
2. (Original) The method of claim 1 in which step (a) includes:
 - (i) providing a frame having a base formed with a number of spaced mounting bores, a lower flange formed with a number of spaced locator holes and an upper flange formed with a number of spaced surround locator holes;
 - (ii) providing a motor structure having a top plate formed with a number of spaced mounting holes;
 - (iii) aligning the spaced mounting holes in the base of the frame with the spaced mounting holes in the top plate of the motor structure; and
 - (iv) loosely securing a number of screws within the aligning mounting holes of the base of the frame and the top plate of the motor structure.
3. (Original) The method of claim 2 in which step (a) further includes:
 - (i) positioning a centering fixture relative to the frame and the motor structure so that a central sleeve of the centering fixture engages the pole piece of the motor structure, and a number of pins extending from the

centering fixture are received within the locator holes formed in the lower flange of the frame; and

(ii) tightening the screws within the aligning holes in the base of the frame and the top plate of the motor structure.

4. (Original) The method of claim 3 in which step (a) further includes the step of removing the centering fixture from the frame and the motor structure.

5. (Original) The method of claim 1 in which step (b) further comprises:

(i) providing an assembly fixture having a pole element, a number of spider standoff locator holes and a frame plateau formed with a number of spaced surround locator holes and a number of spaced surround fixture mounting holes;

(ii) providing a spider standoff having a spider plateau and a number of spaced locator pins; and

(iii) providing a surround fixture having a number of spaced locator pins.

6. (Original) The method of claim 5 in which step (b) further comprises:

(i) affixing an adaptor to the voice coil, the adaptor having at least one glue well; and

(ii) affixing the lower suspension to the adaptor.

7. The method of claim 6 in which step (b) further comprises positioning the spider standoff relative to the assembly fixture so that the spaced locator pins of the spider standoff engage the spider standoff locator holes in the assembly fixture.

8. (Original) The method of claim 7 in which step (b) further comprises:

(i) positioning the voice coil over the pole element of the assembly fixture so that the lower suspension engages the spider plateau of the spider standoff; and

(ii) affixing the lower suspension to the spider plateau.

9. (Original) The method of claim 8 in which said step (i) further includes allowing the lower suspension to move along the spider plateau as the voice coil is positioned over the pole element to relieve tolerance stack up and to ensure concentricity of the voice coil relative to the pole element.

10. (Original) The method of claim 9 in which step (b) further includes providing an upper suspension connected to a first end of a diaphragm, the upper suspension having an outer flange formed with a number of spaced surround locator pins and a number of spaced mounting holes, the diaphragm having a second end formed with a foot.

11. (Original) The method of claim 10 in which step (b) further includes positioning the upper suspension and the diaphragm onto the assembly fixture so that the foot of the diaphragm is received within the at least one glue well of the adaptor affixed to the voice coil, and the spaced surround locator pins on the outer flange of the upper suspension are received within the spaced surround locator holes in the frame plateau of the assembly fixture.

12. (Original) The method of claim 11 in which step (b) further includes positioning the surround fixture onto the outer flange of the upper suspension so that the spaced locator pins of the surround fixture are received by the spaced surround clamp mounting holes in the frame plateau thereby securing the upper suspension and diaphragm to the assembly fixture.

13. (Original) The method of claim 11 further including the step of allowing the foot of the diaphragm to move within the at least one glue well of the adaptor to relieve tolerance stack up in the moving assembly, and then affixing the foot of the diaphragm to the at least one glue well.

14. (Original) The method of claim 13 in which step (b) further includes removing the moving assembly from the assembly fixture.

15. (Original) The method of claim 14 in which step (c) further comprises:

- (i) positioning the voice coil over the pole piece of the motor structure;
- (ii) inserting the spider standoff locator pins of the spider standoff through the locator holes in the lower flange of the frame; and
- (iii) inserting the surround locator pins of the upper suspension within the locator holes in the upper flange of the frame.

16. (Original) The method of claim 15 in which step (c) further comprises:

- (i) positioning a surround clamp onto the outer flange of the upper suspension so that threaded holes formed in the surround clamp align with the mounting holes in the outer flange of the upper suspension and with mounting holes in the upper flange of the speaker frame;
- (ii) inserting screws into the aligning mounting holes of the upper flange of the speaker frame, the mounting holes of the outer flange and the threaded holes of the surround clamp to secure the surround clamp to the upper suspension and to the speaker frame.

17. (Original) The method of claim 15 in which step (c) further includes threading nuts onto the end of the spider standoff locator pins extending through the locator holes in the lower flange of the speaker frame to secure the spider standoff to the speaker frame.

Claims 18-39 (Canceled).